

Safety Data Sheet

 according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

 Date of issue: 17/08/2022
 Revision date:
 Supersedes:
 Version: 1.0

 MF-LYS-C-IR

SECTION 1: Identification of the subs	tance/mixture and of the company/undertaking	
1.1. Product identifier		
Product form	: Mixtures	
Product name	: Mouse Express L-LYSINE (13C6, 99%) IRRADIATED MOUSE FEED	
Product code	: MF-LYS-C-IR	
1.2. Relevant identified uses of the substa	ance or mixture and uses advised against	
1.2.1. Relevant identified uses		
Main use category	: Professional use	
Industrial/Professional use spec	: For professional use only	
1.2.2. Uses advised against No additional information available		
1.3. Details of the supplier of the safety da	ata sheet	
Cambridge Isotope Laboratories, Inc. 50 Frontage Road Andover, MA 01810 USA		
USA: 1-800-322-1174 Int: 1-978-749-8000 <u>cilsales@isotope.com</u> www.isotope.com		
Emergency telephone number		
Emergency numbers:		
Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)		
SECTION 2: Hazards identification		
2.1. Classification of the substance or mix	xture	
Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified		
Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Not classified		
GHS-US classification Not classified		
Adverse physicochemical, human health and e No additional information available	environmental effects	
2.2. Label elements		
Labeling according to Regulation (EC) No. 127	2/2008 [CLP]	
No labeling applicable	1-000 [0]	
GHS-US labeling		
No labeling applicable		
2.3. Other hazards		
No additional information available		
SECTION 3: Composition/Information	on ingredients	
3.1. Substances		
Not applicable		
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3.2. Mixtures			
Name	Product identifier	%	Classification according to Directive 67/548/EEC
SUCROSE UNLABELED	(CAS-No.) 57-50-1 (EC-No.) 200-334-9	35.08	Not classified
CORN STARCH UNLABELED	(CAS-No.) 9005-25-8 (EC-No.) 232-679-6 (EC Index-No.)	15	Not classified
MALTODEXTRIN UNLABELED	(CAS-No.) 9050-36-6 (EC-No.) (EC Index-No.)	15	Not classified
SOYBEAN OIL UNLABELED	(CAS-No.) 8001-22-7 (EC-No.) 232-274-4	8	Not classified
L-GLUTAMIC ACID UNLABELED	(CAS-No.) 56-86-0 (EC-No.) 200-293-7	4	Not classified
MINERAL MIX, AIN-93M-MX (94049) UNLABELED	(CAS-No.) (EC-No.) (EC Index-No.)	3.5	Not classified
CELLULOSE UNLABELED	(CAS-No.) 9004-34-6 (EC-No.) 232-674-9	3	Not classified
GLYCINE UNLABELED	(CAS-No.) 56-40-6 (EC-No.) 200-272-2	2.33	Not classified
VITAMIN MIX, AIN-93-VX (94047) UNLABELED	(CAS-No.) (EC-No.) (EC Index-No.)	1.95	Not classified
L-ARGININE:HCL UNLABELED	(CAS-No.) 1119-34-2 (EC-No.) 214-275-1	1.21	Xi; R36/38
L-LYSINE:2HCL (13C6, 99%)	(CAS-No.) 657-26-1 (Unlabeled) (EC-No.) 211-518-3 (Unlabeled)	1.2	R43
L-LEUCINE UNLABELED	(CAS-No.) 61-90-5 (EC-No.) 200-522-0	1.11	Not classified
L-VALINE UNLABELED	(CAS-No.) 72-18-4 (EC-No.) 200-773-6	0.82	Not classified
L-THREONINE UNLABELED	(CAS-No.) 72-19-5 (EC-No.) 200-774-1	0.82	Not classified
L-ISOLEUCINE UNLABELED	(CAS-No.) 73-32-5 (EC-No.) 200-798-2	0.82	Not classified
L-METHIONINE UNLABELED	(CAS-No.) 63-68-3 (EC-No.) 200-562-9	0.82	Not classified
CALCIUM PHOSPHATE MONOBASIC MONOHYDRATE UNLABELED	(CAS-No.) 10031-30-8 (EC-No.) 231-837-1 (EC Index-No.)	0.82	Xi; R36/37/38
L-PHENYLALANINE UNLABELED	(CAS-No.) 63-91-2 (EC-No.) 200-568-1	0.75	Not classified
L-ASPARAGINE UNLABELED	(CAS-No.) 70-47-3 (EC-No.) 200-735-9 (EC Index-No.)	0.598	Not classified
L-TYROSINE UNLABELED	(CAS-No.) 60-18-4 (EC-No.) 200-460-4	0.5	Xi; R36/37/38
L-HISTIDINE:HCL:H2O UNLABELED	(CAS-No.) 71-00-1 (EC-No.) 200-745-3	0.45	Not classified
L-ALANINE UNLABELED	(CAS-No.) 56-41-7 (EC-No.) 200-273-8	0.35	Not classified
L-ASPARTIC ACID UNLABELED	(EC-No.) 200-273-8 (CAS-No.) 56-84-8 (EC-No.) 200-291-6 (EC Index-No.) (REACH-no) 01-2119966139-27	0.35	Not classified
L-PROLINE UNLABELED	(CAS-No.) 147-85-3 (EC-No.) 205-702-2	0.35	Not classified
L-CYSTINE UNLABELED	(CAS-No.) 200-702-2 (CAS-No.) 56-89-3 (EC-No.) 200-296-3	0.35	Not classified
L-SERINE UNLABELED	(CAS-No.) 302-84-1 (EC-No.) 206-130-6	0.35	Not classified
CHOLINE BITARTRATE UNLABELED	(CAS-No.) 87-67-2 (EC-No.) 201-763-4 (EC Index-No.)	0.28	Not classified
L-TRYPTOPHAN UNLABELED	(CAS-No.) 73-22-3 (EC-No.) 200-795-6	0.18	Not classified
AQUA GREEN FOOD COLOR UNLABELED	(EC-N0.) 2353-45-9 (EC-No.) (EC Index-No.)	0.01	Not classified
TBHQ UNLABELED	(CAS-No.) 1948-33-0 (EC-No.) 217-752-2	0.002	Not classified

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CORN STARCH UNLABELED	(CAS-No.) 9005-25-8 (EC-No.) 232-679-6 (EC Index-No.)	15	Not classified
MALTODEXTRIN UNLABELED	(CAS-No.) 9050-36-6 (EC-No.) (EC Index-No.)	15	Not classified
SOYBEAN OIL UNLABELED	(CAS-No.) 8001-22-7 (EC-No.) 232-274-4	8	Not classified
L-GLUTAMIC ACID UNLABELED	(CAS-No.) 56-86-0 (EC-No.) 200-293-7	4	Not classified
MINERAL MIX, AIN-93M-MX (94049) UNLABELED	(CAS-No.) (EC-No.) (EC Index-No.)	3.5	Not classified
CELLULOSE UNLABELED	(CAS-No.) 9004-34-6 (EC-No.) 232-674-9	3	Not classified
GLYCINE UNLABELED	(CAS-No.) 56-40-6 (EC-No.) 200-272-2	2.33	Not classified
VITAMIN MIX, AIN-93-VX (94047) UNLABELED	(CAS-No.) (EC-No.) (EC Index-No.)	1.95	Not classified
L-ARGININE:HCL UNLABELED	(CAS-No.) 1119-34-2 (EC-No.) 214-275-1	1.21	Skin Irrit. 2, H315 Eye Irrit. 2, H319
L-LYSINE:2HCL (13C6, 99%)	(CAS-No.) 657-26-1 (Unlabeled) (EC-No.) 211-518-3 (Unlabeled)	1.2	Skin Sens. 1, H317
L-LEUCINE UNLABELED	(CAS-No.) 61-90-5 (EC-No.) 200-522-0	1.11	Not classified
L-VALINE UNLABELED	(CAS-No.) 72-18-4 (EC-No.) 200-773-6	0.82	Not classified
L-THREONINE UNLABELED	(CAS-No.) 72-19-5 (EC-No.) 200-774-1	0.82	Not classified
L-ISOLEUCINE UNLABELED	(CAS-No.) 73-32-5 (EC-No.) 200-798-2	0.82	Not classified
L-METHIONINE UNLABELED	(CAS-No.) 63-68-3 (EC-No.) 200-562-9	0.82	Not classified
CALCIUM PHOSPHATE MONOBASIC MONOHYDRATE UNLABELED	(CAS-No.) 10031-30-8 (EC-No.) 231-837-1 (EC Index-No.)	0.82	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
L-PHENYLALANINE UNLABELED	(CAS-No.) 63-91-2 (EC-No.) 200-568-1	0.75	Not classified
L-ASPARAGINE UNLABELED	(CAS-No.) 70-47-3 (EC-No.) 200-735-9 (EC Index-No.)	0.598	Not classified
L-TYROSINE UNLABELED	(CAS-No.) 60-18-4 (EC-No.) 200-460-4	0.5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
L-HISTIDINE:HCL:H2O UNLABELED	(CAS-No.) 71-00-1 (EC-No.) 200-745-3	0.45	Not classified
L-ALANINE UNLABELED	(CAS-No.) 200-743-3 (CAS-No.) 56-41-7 (EC-No.) 200-273-8	0.35	Not classified
L-ASPARTIC ACID UNLABELED	(EC-No.) 200-273-8 (CAS-No.) 56-84-8 (EC-No.) 200-291-6 (EC Index-No.) (REACH-no) 01-2119966139-27	0.35	Not classified
L-PROLINE UNLABELED	(CAS-No.) 147-85-3 (EC-No.) 205-702-2	0.35	Not classified
L-CYSTINE UNLABELED	(CAS-No.) 56-89-3 (EC-No.) 200-296-3	0.35	Not classified
L-SERINE UNLABELED	(CAS-No.) 200-230-3 (CAS-No.) 302-84-1 (EC-No.) 206-130-6	0.35	Not classified
CHOLINE BITARTRATE UNLABELED	(EC-No.) 200-130-0 (CAS-No.) 87-67-2 (EC-No.) 201-763-4 (EC Index-No.)	0.28	Not classified
L-TRYPTOPHAN UNLABELED	(CAS-No.) 73-22-3 (EC-No.) 200-795-6	0.18	Not classified
AQUA GREEN FOOD COLOR UNLABELED	(CAS-No.) 2353-45-9 (EC-No.) (EC Index-No.)	0.01	Not classified
TBHQ UNLABELED	(CAS-No.) 1948-33-0 (EC-No.) 217-752-2	0.002	Not classified
Name	Product identifier	%	GHS-US classification
L-GLUTAMIC ACID UNLABELED	(CAS-No.) 56-86-0	4	Not classified

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Name	Product identifier	%	GHS-US classification
L-ARGININE:HCL UNLABELED	(CAS-No.) 1119-34-2	1.21	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
L-LYSINE:2HCL (13C6, 99%)	(CAS-No.) 657-26-1 (Unlabeled)	1.2	Skin Sens. 1, H317

Full text of R- and H- phrases: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger are
First-aid measures after inhalation	: When symptoms occur: go into open air and ventilate suspected area. If not breathing, give artificial respiration. Get medical advice/attention.
First-aid measures after skin contact	: Wash with plenty of soap and water. Get immediate medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.
4.2. Most important symptoms and ef	fects, both acute and delayed
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.
I.3. Indication of any immediate medi	cal attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
.2. Special hazards arising from the	
Reactivity	: Not available.
.3. Advice for firefighters	
irefighting instructions	 Fight fire with normal precautions from a reasonable distance. Wear a self contained breathin apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	 Do not enter fire area without proper protective equipment, including respiratory protection. Wear recommended personal protective equipment.
SECTION 6: Accidental release me	easures
5.1. Personal precautions, protective	equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Avoid breathing vapors, mist, gas. Avoid dust formation. Avoid contact with skin and eyes.
5.1.2. For emergency responders No additional information available	
6.2. Environmental precautions	
	o not allow to enter drains or water courses. Avoid release to the environment.
.3. Methods and material for contain	
For containment	: Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.
Aethods for cleaning up	: This material and its container must be disposed of in a safe way, and as per local legislation
. .	
5.4. Reference to other sections No additional information available	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Avoid all eye and skin contact and do not breathe vapor and mist. Normal measures for preventive fire protection.
Precautions for safe handling	: Provide adequate ventilation to minimize dust and/or vapor concentrations.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
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	storage, including any incompatibilities			
Fechnical measures Storage conditions	Store in a well-ventilated place. KeepStore product at 4°C or lower.	o container tightly closed.		
7.3. Specific end use(s) No additional information availal				
	ontrols/personal protection			
8.1. Control parameters	ontrois/personal protection			
SUCROSE UNLABELED (57-	50-1)			
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³		
SOYBEAN OIL UNLABELED	(8001-22-7)			
Belgium	Limit value (mg/m ³)	10 mg/m ³ (Huiles végétales (brouillards); Belgium; Time-weighted average exposure limit 8 h)		
CELLULOSE UNLABELED (S	9004-34-6)			
Belgium	Limit value (mg/m³)	10 mg/m ³ (Cellulose; Belgium; Time-weighted average exposure limit 8 h)		
France	VME (mg/m³)	10 mg/m ³ (Cellulose (fibre de papier); France; Time- weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative)		
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m ³ (Cellulose; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Cotton dust, raw, untreated; 0.1 mg/m ³ ; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Thoracic fraction)		
United Kingdom	WEL TWA (mg/m³)	10 mg/m ³ Cellulose inhalable dust; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005); Cellulose respirable dust; 4 mg/m ³ ; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)		
United Kingdom	WEL STEL (mg/m³)	20 mg/m ³ Cellulose inhalable dust; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)		
CORN STARCH UNLABELED (9005-25-8)				
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m ³ Dermatitis. Not classifiable as a human carcinogen		
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³		
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m ³		
.2. Exposure controls				

Appropriate engineering controls

: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Personal protective equipment

: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



Materials for protective clothing Hand protection Eye protection Skin and body protection

- : Wear suitable protective clothing and gloves. Wear suitable protective clothing and gloves. :
 - : Wear eye protection. Chemical goggles or face shield with safety glasses.
 - : Wear suitable protective clothing, gloves and eye/face protection.
- Respiratory protection : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.

SECTION 9: Physical and chemical properties

9.1.	Information on basic physical and o	che	mical properties
The prop	perties listed below are for the solvent, the main compor	nent	of this mixture.
Physic	al state	:	Solid
Appea	rance	:	Pellets
Color		:	Aqua Green
Odor		:	No data available

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Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. Other information No additional information available

No additional information available			
SECTION 10: Stability and reactivity			
10.1. Reactivity			
Not available.			
10.2. Chemical stability			
Six months unopened when stored under recomme	ended conditions.		
10.3. Possibility of hazardous reactions			
No dangerous reactions known under normal cond	itions of use.		
10.4. Conditions to avoid			
None under recommended storage and handling c	onditions (see section 7).		
10.5. Incompatible materials			
Strong oxidizing agents			
10.6. Hazardous decomposition products			
Carbon oxides (CO, CO2)			
SECTION 11: Toxicological informatio	n		
11.1. Information on toxicological effects			
Acute toxicity :	Not classified		
L-ALANINE UNLABELED (56-41-7)			
LD50 oral rat	> 5110 mg/kg male and female		
L-ASPARTIC ACID UNLABELED (56-84-8)			
LD50 oral rat 5000 mg/kg			
LD50 dermal rabbit 5000 mg/kg			
L-ARGININE:HCL UNLABELED (1119-34-2)			
LD50 oral rat	12400 mg/kg		
ATE CLP (oral) 12000.000 mg/kg body weight			
SUCROSE UNLABELED (57-50-1)			

29700 mg/kg Somnolence, Cyanosis, Diarrhea

> 2000 mg/kg Rat female - (OECD Test Guideline 423)

29700.000 mg/kg body weight

L-VALINE UNLABELED (72-18-4)

LD50 oral rat

LD50 oral rat

ATE CLP (oral)

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L-VALINE UNLABELED (72-18-4)	
LD50 dermal rat	5390 mg/kg
LC50 inhalation rat (mg/l)	> 5260 mg/m ³ (OECD Test Guideline 403)
L-PROLINE UNLABELED (147-85-3)	·
LD50 oral rat	> 5110 mg/kg
L-HISTIDINE:HCL:H2O UNLABELED (71-00-1	
LD50 oral rat	15000 mg/kg
ATE CLP (oral)	15000.000 mg/kg body weight
GLYCINE UNLABELED (56-40-6)	
LD50 oral rat	7930 mg/kg
ATE CLP (oral)	7930.000 mg/kg body weight
L-TRYPTOPHAN UNLABELED (73-22-3)	
LD50 oral rat	> 16000 mg/kg
L-LEUCINE UNLABELED (61-90-5)	> 16000 malka male and famela
LD50 oral rat LD50 Intraperitoneal - Rat - 5,379 mg/kg	 > 16000 mg/kg male and female Lungs, Thorax, or Respiration: Dyspnea. Nutritional and Gross Metabolic: Changes in: Body
Remarks	temperature decrease.
L-TYROSINE UNLABELED (60-18-4)	
Additional information	LD50 Intraperitoneal - mouse - > 1,450 mg/kg
L-METHIONINE UNLABELED (63-68-3)	
LD50 oral rat	36000 mg/kg Remarks: Behavioral: Change in motor activity (specific assay). Skin and
	Appendages: Allergic (Multiple organ involvement) Anaphylaxix.
CELLULOSE UNLABELED (9004-34-6)	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 6 mg/l/4h (Rat)
CALCIUM PHOSPHATE MONOBASIC MONO	HYDRATE UNLABELED (10031-30-8)
LD50 oral rat	17500 mg/kg Remarks: Peripheral Nerve and Sensation: Flaccid paralysis without anesthesia (usually neuromuscular blockage). Behavioral: Somnolence (general depressed activity). Lungs, Thorax, or Respiration: Respiratory stimulation.
L-GLUTAMIC ACID UNLABELED (56-86-0)	
LD50 oral rat	> 5110 mg/kg male and female
LD50 dermal rat	> 2000 mg/kg male and female (OECD Test Guideline 402)
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
L-LEUCINE UNLABELED (61-90-5)	
NOAEL (oral,rat,90 days)	3840 mg/kg bodyweight/day female
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.

- Symptoms/effects after skin contact : May be harmful in contact with skin. May cause moderate irritation.
- Symptoms/effects after eye contact : May cause eye irritation.
- Symptoms/effects after ingestion : May be harmful if swallowed.

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SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.	
L-ALANINE UNLABELED (56-41-7)		
EC50 Daphnia 1	> 100 mg/l static test EC50 - Daphnia magna (Water flea) - 48 h (OECD Test Guideline 202)	
L-VALINE UNLABELED (72-18-4)		
LC50 fish 1	> 10 g/l Danio rerio (zebra fish) - (OECD Test Guideline 203) - 96 h	
EC50 Daphnia 1	> 10 g/l Daphnia magna (Water flea) - (OECD Test Guideline 202) - 24 h	
L-PROLINE UNLABELED (147-85-3)		
EC50 Daphnia 1	> 100 mg/l - Daphnia magna (Water flea) - 48 h	
CELLULOSE UNLABELED (9004-34-6)		
LC50 fish 1	> 100 mg/l (LC50)	
EC50 Daphnia 1	> 100 mg/l (EC50)	
Threshold limit algae 1	> 100 mg/l (EC50)	
L-GLUTAMIC ACID UNLABELED (56-86-0)		
LC50 fish 1	> 100 mg/l Cyprinus carpio (Carp) - static test - 96 h	
EC50 Daphnia 1	> 100 g/l Daphnia magna (Water flea) - 48 h (OECD Test Guideline 202)	
EC50 other aquatic organisms 1	> 31 mg/l Pseudokirchneriella subcapitata (green algae) - static test - 72 h	

12.2. Persistence and degradability

L-VALINE UNLABELED (72-18-4)			
Persistence and degradability	Aerobic - exposure time: 28 d.		
SOYBEAN OIL UNLABELED (8001-22-7)			
Persistence and degradability	Not readily biodegradable in water. No (test)data on mobility of the substance available.		
BOD (% of ThOD)	0.39		
CELLULOSE UNLABELED (9004-34-6)			
Persistence and degradability	Biodegradable in water.		
L-GLUTAMIC ACID UNLABELED (56-86-0)			
Persistence and degradability	Aerobic - exposure time: 28 d.		
Biodegradation	97 % Readily biodegradable		
12.3. Bioaccumulative potential			
L-ALANINE UNLABELED (56-41-7)			
Log Pow	-2.74 at 20 °C (68 °F)		
L-VALINE UNLABELED (72-18-4)			
Log Pow	-2.259 at 20 °C (68 °F)		
L-THREONINE UNLABELED (72-19-5)			
Log Pow	-1.43		
L-ISOLEUCINE UNLABELED (73-32-5)			
Log Pow	-1.58		
L-TYROSINE UNLABELED (60-18-4)			
Log Pow	-2.26 at 25 °C (77 °F)		
SOYBEAN OIL UNLABELED (8001-22-7)			
Bioaccumulative potential	Not bioaccumulative.		
CELLULOSE UNLABELED (9004-34-6)			
Bioaccumulative potential	Bioaccumulation: not applicable.		
L-GLUTAMIC ACID UNLABELED (56-86-0)			
Log Pow	< -4 at 20 °C (68 °F)		
12.4. Mobility in soil			
SOYBEAN OIL UNLABELED (8001-22-7)			
Surface tension	0.025 N/m (20 °C)		
12.5. Results of PBT and vPvB assessment			
No additional information available	No additional information available		

No additional information available

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12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal consideration	S .
13.1. Waste treatment methods	
Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.
Product/Packaging disposal recommendations	: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Ecology - waste materials	: Dispose of as unused product.
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / AD	N .
14.1. UN number	
Not applicable	
14.2. UN proper shipping name	
Not applicable	
14.3. Additional information	
Other information	: No supplementary information available.
Special transport precautions	: Not classified as dangerous in the meaning of transport regulations.
Overland transport	
No additional information available	
Transport by sea	
No additional information available	
Air transport	
No additional information available	
14.4. Environmental hazards	
Other information	: No supplementary information available.
14.5. Special precautions for user	
Special transport precautions	: Not classified as dangerous in the meaning of transport regulations.
	x II of MARPOL 73/78 and the IBC Code
Not applicable	
SECTION 15: Regulatory information	
15.1. US Federal regulations	
Mouse Express L-LYSINE (13C6, 99%) IRRAD	NATED MOUSE FEED
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
L-ARGININE:HCL UNLABELED (1119-34-2)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
L-LYSINE:2HCL (13C6, 99%) (657-26-1 (Unlab	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
L-GLUTAMIC ACID UNLABELED (56-86-0)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

Quantity (TPQ)

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L-GLUTAMIC ACID UNLABELED (56-86-0)		
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.	

15.2. International regulations

CANADA

Mouse Express L-LYSINE (13C6, 99%) IRRADIATED MOUSE FEED	
Not listed on the Canadian DSL (Domestic Substances List)	

15.2.1. **National regulations**

No additional information available

15.3. US State regulations				
Mouse Express L-LYSINE (13C6, 99%) IRRADIATED MOUSE FEED()				
U.S California - Proposition 65 - Carcinogens List		No		
U.S California - Proposition 65 - Developmental Toxicity		No		
U.S California - Proposition 65 - Reproductive Toxicity - Female		No		
U.S California - Proposition 65 - Reproductive Toxicity - Male		No		
State or local regulations		RTK - U.S Pennsylvania - RTK (Right to Know) List RTK - U.S New Jersey - Right to Know Hazardous Substance List		
L-ARGININE:HCL UNLABE	LED (1119-34-2)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
L-LYSINE:2HCL (13C6, 99%	(657-26-1 (Unlabeled))			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
L-GLUTAMIC ACID UNLAB	BELED (56-86-0)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
L-ARGININE:HCL UNLABE	LED (1119-34-2)			
State or local regulations				
RTK - U.S Pennsylvania - RTK (Right to Know) List RTK - U.S New Jersey - Right to Know Hazardous Substance List				
L-LYSINE:2HCL (13C6, 99%) (657-26-1 (Unlabeled))				
State or local regulations				
RTK - U.S Pennsylvania - RTK (Right to Know) List RTK - U.S New Jersey - Right to Know Hazardous Substance List				
L-GLUTAMIC ACID UNLABELED (56-86-0)				
State or local regulations				
RTK - U.S Pennsylvania - RTK (Right to Know) List RTK - U.S New Jersey - Right to Know Hazardous Substance List				

LYS-C-IR

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 16: Other information

Other information

: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases:

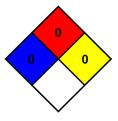
,		
Eye Irrit. 2	Serious eye damage/eye irritation Category 2	
Skin Irrit. 2	Skin corrosion/irritation Category 2	
Skin Sens. 1	Skin sensitization, Category 1	
STOT SE 3	Specific target organ toxicity (single exposure) Category 3	
H315	Causes skin irritation	
H317	May cause an allergic skin reaction	
H319	Causes serious eye irritation	
H335	May cause respiratory irritation	
R36/37/38	Irritating to eyes, respiratory system and skin	
R36/38	Irritating to eyes and skin	
R43	May cause sensitization by skin contact	
Xi	Irritant	

NFPA health hazard NFPA fire hazard

: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

: 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

NFPA reactivity

•	
Health	: 0 Minimal Hazard - No significant risk to health
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard

CIL Mixture SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product